

Results

Crash Reductions (Using 3 Year Before and After Periods)

Total Crashes:	92.3% Reduction	(From 26 crashes to 2 crashes)
Target Crashes*:	91.3% Reduction	(From 23 crashes to 2 crashes)
Target Injury Crashes:	94.1% Reduction	(From 17 crashes to 1 crash)
Target PDO Crashes:	83.3% Reduction	(From 6 crashes to 1 crash)
AADT:	No Change	(3700 vehicles)

\* Target Crashes include all Frontal Impact Crashes.  
The Frontal Impact Crash types considered are as follows: Left Turn-Same Roadway, Left Turn-Different Roadways, Right Turn-Same Roadway, Right Turn-Different Roadways, Head On, and Angle.

The Treatment Location appears to have had a substantial decrease in both Total and Target Crashes from the before to the after period. The combination of safety treatments appear to have dramatically reduced the number and severity of Angle crashes by warning motorists of the intersection and reducing vehicle approach speeds.

For the complete project evaluation report and reports on other projects, please go to:  
<http://www.ncdot.org/doh/preconstruct/traffic/Safety/ses/projects/completed.html>

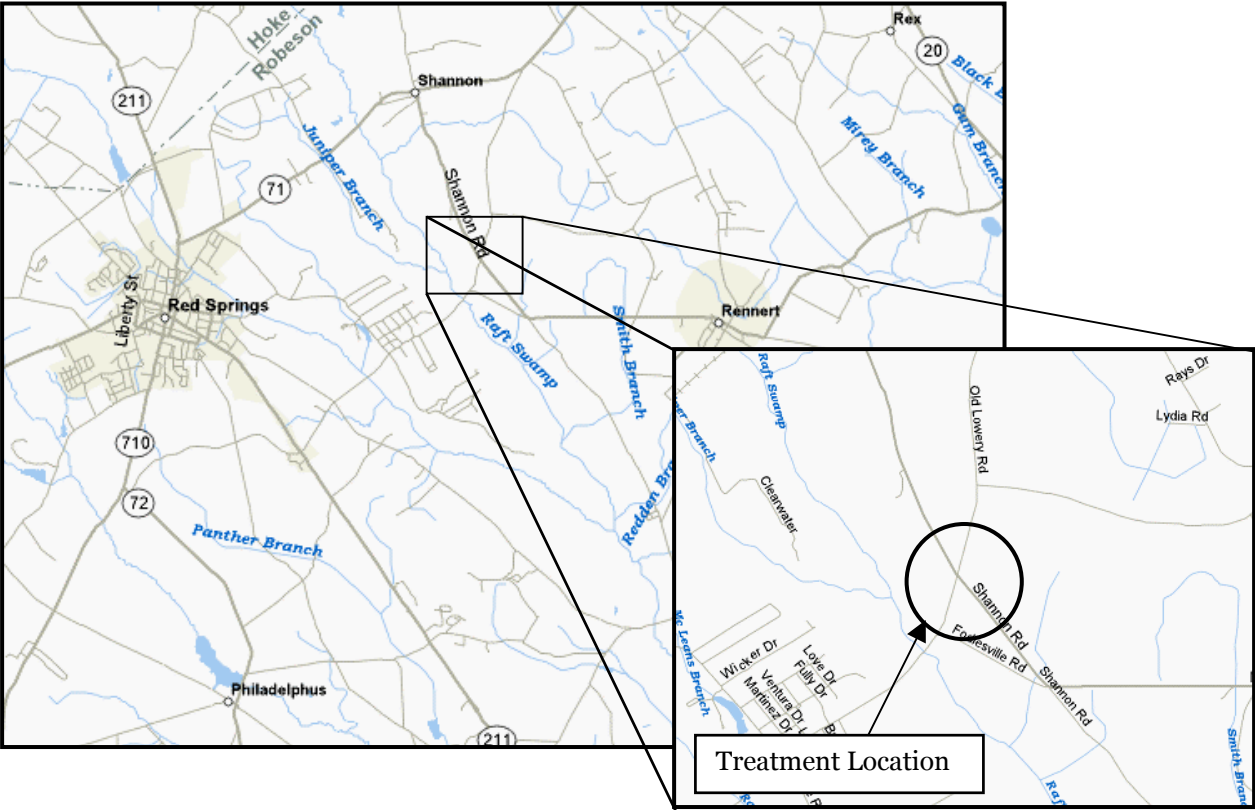
North Carolina Department of Transportation  
Traffic Engineering and Safety Systems Branch  
Traffic Safety Systems Management Section  
Safety Evaluation Group

Project Evaluation

The Installation of an Overhead Flashing Traffic Signal and the Conversion to Four-Way Stop Sign Control at the Intersection of SR 1001 (Shannon Road) and SR 1505 (Old Lowery Road) In Robeson County

The subject intersection is located east of the Red Springs municipal limits. Prior to the project improvements, the intersection was controlled by stop signs located on SR 1505 (Old Lowery Road). Traffic Engineering staff originally recognized this location as needing safety improvements because it was experiencing a large number of frontal impact type crashes. Vehicles on SR 1505 (Old Lowery Road) were choosing improper gaps and were struck when entering the intersection. The safety treatments were intended to alleviate this crash pattern by warning motorists of the intersection and by lowering vehicle speeds when travelling through the intersection.

The Four-Way Stop was installed and operational on March 26, 2002. All other improvements, including the overhead flashing traffic signal and “Stop-Ahead” pavement markings, were completed by September 3, 2002. Both SR 1001 (Shannon Road) and SR 1505 (Old Lowery Road) are two-lane facilities at the treatment intersection with a speed limit of 55 mph.

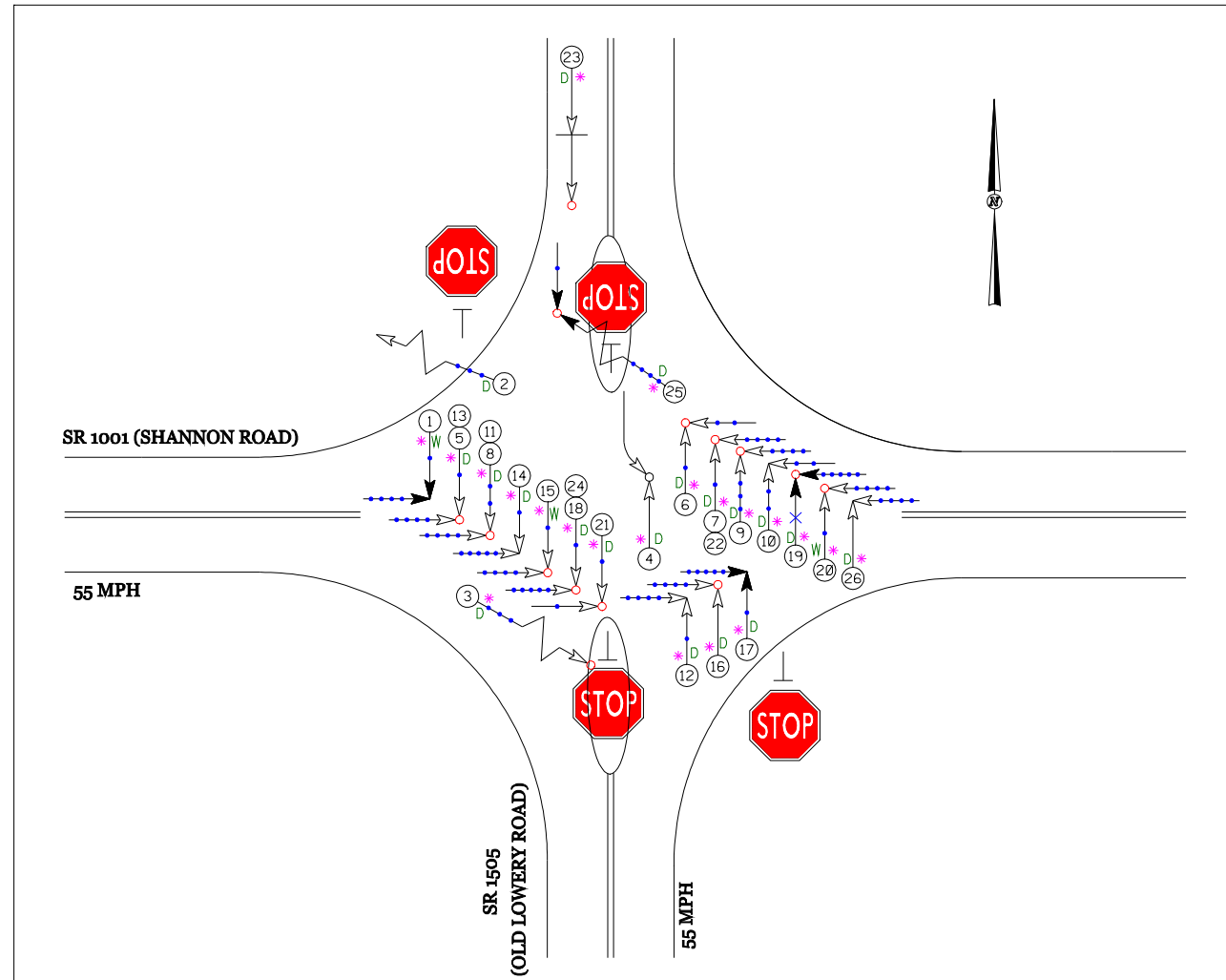


## Before Period Collision Diagram

February 1, 1999 through January 31, 2002

(3 Years of Crash Data)

2000 ADT = 3700



- 26 Total Crashes
- 21 Angle Crashes
- 1 Left Turn-Same Roadway Crash
- 1 Head On Crash
- 2 Run Off Road Crashes
- 1 Rear End Crash

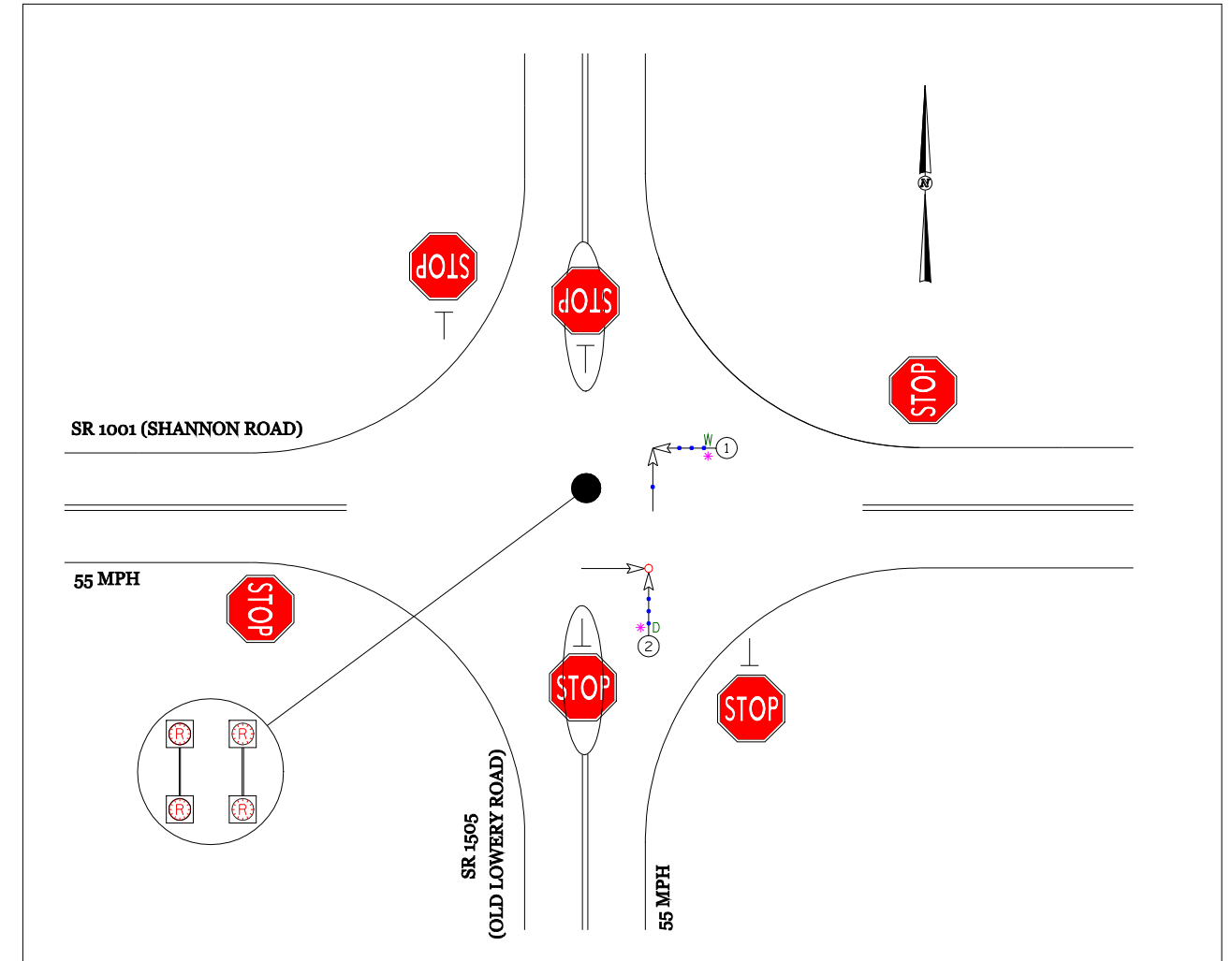
- 23 Target Crashes\*
- 17 Target Injury Crashes
- 6 Target PDO Crashes

## After Period Collision Diagram

November 1, 2002 through October 31, 2005

(3 Years of Crash Data)

2004 ADT = 3700



- 2 Total Crashes
- 2 Angle Crashes

- 2 Target Crashes\*
- 1 Target Injury Crash
- 1 Target PDO Crash

\* Target Crashes are deemed correctable by the treatment.

For this evaluation, Target Crashes include all Frontal Impact Crashes such as:  
Left Turn-Same Roadway, Left Turn-Different Roadways, Right Turn-Same Roadway,  
Right Turn-Different Roadways, Head On, and Angle